
ENVIRONMENTAL Fact Sheet



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Management of Bilge Wastewater for Marinas

Bilges are located at the vessel's gravitational low point and collect everything from engine oil, fuel, debris, wash water (containing soap, oil and other organic material), and lake, ocean or river water. Bilge wastewater may contain a variety of harmful constituents such as benzene, ethyl benzene, xylenes, toluene, methyl tertiary-butyl ether (MtBE), petroleum compounds and heavy metals. Although it may only be a tiny amount of wastewater collected in the bilge, the cumulative impacts can be damaging if disposed improperly.

Best Management Practices

- **Use Bilge Socks, Pillows, and Mats**

A common practice among marinas is to place bilge socks, mats or pillows in bilges to absorb contaminants. These products may absorb oil and fuel, but they do not absorb MtBE, which has been detected in approximately 15 percent of public water systems. Furthermore, the absorbent material must be tested prior to disposal to determine if it is a hazardous waste. If the marina can verify that the absorbent is only contaminated with oil, and not mixed with gasoline or heavy metals, the absorbent can be managed as a solid waste.



- **Purchase a Vacuum System**

A vacuum system removes all the bilge water and pumps it into drums for off-site treatment and disposal.

Proper Disposal of Bilge Wastewater

It is not recommended that bilge wastewater be discharged to surface water. To begin with, a federal National Pollutant Discharge Elimination System (NPDES) permit and a state discharge permit are required in order to discharge any wastewater (including bilge wastewater) to surface water. Applicants would have to file an extensive NPDES permit application with accompanying analytical results with the U.S. Environmental Protection Agency (EPA) 180 days prior to any discharge. The NPDES permit issued by the EPA would likely contain discharge limitations that typically are met after treatment of the wastewater prior to discharge. Furthermore, the NPDES permit typically requires monthly sampling and analyses of the treated discharge, and monthly reporting to both the EPA and the New Hampshire Department of Environmental Services (DES).

The State would adopt the federal NPDES permit as the state discharge permit after it has been issued for regulation, compliance and enforcement by both regulatory agencies. So, while the

option of getting a NPDES permit for the disposal of bilge wastewater is technically available, it will most likely be less feasible and less environmentally sound than other options for disposal. These other more feasible and environmentally sound options are discussed herein. (However, if you wish to explore the NPDES permit option, you may contact Jeff Andrews, DES, at (603) 271-2984.)

Also it is not recommended that bilge wastewater be discharged to the land (i.e. parking lot, vessel-cleaning station, storm drain), where it could contaminate groundwater.

The bilge wastewater is considered a waste and subject to a hazardous waste determination. Disposal options for bilge wastewater depend on whether the waste has been determined to be hazardous or non-hazardous. The wastewater should be tested for "toxicity characteristic leaching procedure" (TCLP) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), volatile organic compounds (VOCs) by EPA 8260 method, and ignitability. The DES Spill Response Complaint Investigation Section can assist you in the hazardous waste determination process and maintains a list of laboratories that can perform the TCLP test. After the wastewater has been tested once, the marina may use subsequent generator knowledge of the characteristics of the waste to make a determination, rather than test every time the waste is sent for disposal. However, this rule does not apply if there has been a change in the process.

Depending on the hazardous waste determination, the bilge wastewater can be transported off-site for disposal as hazardous waste, discharged to the sewer, or transported for off-site disposal as a non-hazardous waste.

- 1. Transport Off-Site for Disposal as Hazardous Waste**

If the TLCP shows the wastewater to contain hazardous constituents above the regulatory limit, the wastewater must be disposed as a hazardous waste per the N.H. Hazardous Waste Rules. Contact a licensed hazardous waste transporter to dispose of the waste accordingly. The waste counts toward the marina's generator status, must be manifested, and the marina is charged a New Hampshire hazardous waste fee.

- 2. Discharge to Sewer as Non-Hazardous Waste**

If the bilge wastewater is non-hazardous (as determined through the hazardous waste determination), then the marina may be able to discharge that wastewater to the local publicly owned treatment works (POTW). Check with the POTW to ensure the level of constituents meets the POTW's sewer use ordinance limitations. Do not discharge to a septic tank or leach field system.

- 3. Transport Off-Site for Disposal as Non-Hazardous Waste**

If the bilge wastewater is non-hazardous (as determined through the hazardous waste determination), then the marina may be able to have the wastewater transported off-site for disposal. As stated above, the marina may contact the local POTW to see if it will accept the non-hazardous bilge wastewater for discharge into the headworks of the facility. Keep in mind that, even as a non-hazardous waste, the bilge wastewater cannot be discharged to surface water without a NPDES permit.

The marina may also contract a transporter or a septic hauler to dispose as a non-hazardous waste. The marina will not have to count the waste towards their generator status and will not have to pay a New Hampshire hazardous waste fee. Label the drums as "non-hazardous wastewater" and have the test results easily accessible.

If using this disposal option, the marina can pump the wastewater into a registered holding tank temporarily for future pick-up and disposal.

4. Discharge to Ground (Underground Injection)

For information regarding a permit to discharge bilge wastewater to ground, please contact DES' Waster Supply Engineering Bureau at (603) 271-2858.

Generator Requirements

The amount of wastewater generated will be used in determining the generators classification as a small quantity and full quantity. Small quantity generators (generate less than 220 pounds/month) have less stringent requirements than full quantity generators, (generates more than 220 pounds/month). There is an economic advantage to remaining a small quantity generator. Be sure the waste is labeled and stored properly at all times. The N.H. Hazardous Rules are available on-line or by contacting the Public Information Center at (603) 271-2975.

Conclusion

These guidelines are meant to address questions surrounding bilge wastewater management and disposal. Contact NHPPP at (800) 273-9469 or nhppp@des.state.nh.us for further information, or for our publication Best Management Practices for NH Marinas.

For More Information

N.H. Department of Environmental Services

Contact the appropriate DES program to verify rules and regulations to ensure your marina is in compliance.

Spill Response Compliant Investigation Section

Telephone: (603) 271-2942

Email: sisnet@des.state.nh.us

Website: www.des.nh.gov/orcb/irs.asp

Groundwater Discharge Permitting and Registration

Telephone: (603) 271-2858

Email: mlocker@des.state.nh.us

Website: <http://www.des.nh.gov/dwspp/gwdisch.htm>

Pretreatment Program (Wastewater)

Telephone: (603) 271-2052

Email: gcarlson@des.state.nh.us

Website: http://www.des.nh.gov/wwe/permits_compliance.htm

Pollution Prevention Program

Telephone: (603) 271-6460

Email: nhppp@des.state.nh.us

Website: <http://www.des.nh.gov/nhppp/marinas.htm>